What is claimed is:

1. A digital video signal record and playback device for recording and playing back on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform, said device comprising:

means for dividing one frame portion of video data into n areas ($n > 1$) with respect to at least an I picture for an intra-frame coding at the time of recording;

means for recording an area which comes to the center on the screen in an area unit by giving a priority to the area with respect to the I picture frame which is divided into n areas while at the same time recording position information representative of the recording position on the recording medium of divided 1 through n areas;

means for reading only an area located at the center of the I picture from the recording medium at the time of the special playback;

a buffer memory for storing data in the area which is read; and

means for outputting only data in the central area which is read.

2. A digital video signal record and playback device according to claim 1 wherein the data in the central area which is read at the time of the special playback is extended to one screen and is outputted for

performing the special playback.

3. A digital video signal playback device for playing back from a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform, said device comprising:

means for reading at the time of special playback only an area located at the center of an I picture from the recording medium wherein, after dividing one frame portion of video data into n areas ($n > 1$) with respect to at least the I picture for an intra-frame coding, an area which comes to the center on the screen is recorded in an area unit by giving a priority to the area with respect to the I picture frame which is divided into n areas, and position information representative of the recording position on the recording medium of divided 1 through n areas is recorded;

a buffer memory for storing data in the area which is read; and

means for outputting only data in the central area which is read.

4. A digital video signal playback device according to claim 3, wherein the data in the central area which is read at the time of the special playback is extended to one screen and is outputted for performing the special playback.

5. A digital video signal record and playback device for

recording and playing back on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform, said device comprising:

means for dividing one frame portion of video data into n areas ($n > 1$) with respect to at least an I picture for an intra-frame coding at the time of recording;

means for recording an area which comes to the center on the screen in an area unit by giving a priority to the area with respect to the I picture frame which is divided into n areas while at the same time recording position information representative of the recording position on the recording medium of divided 1 through n areas;

means for reading at least the I picture from the recording medium at the time of the special playback;

a buffer memory for storing data of the I picture which is read; and

interpolating means for interpolating an area which cannot be read by the use of the data of the preceding screen when the whole I picture area cannot be read.

6. A digital video signal record and playback device for recording and playing back on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal

transform, said device comprising:

means for dividing one frame portion of video data into n areas (n > 1) with respect to at least an I picture for an intra-frame coding at the time of recording;

means for recording an area which comes to the center on the screen in an area unit by giving a priority to the area with respect to the I picture frame which is divided into n areas while at the same time recording position information representative of the recording position on the recording medium of divided 1 through n areas;

means for reading at least the I picture from the recording medium at the time of the special playback;

a buffer memory for storing data of the I picture which is read;

means for outputting one screen portion of a special playback picture in accordance with data for areas 1, 2, ---, n one by one from n consecutive I pictures which are read; and

interpolating means for interpolating an area which cannot be read by the use of the data of the preceding screen when the whole I picture area cannot be read.

7. A digital video signal record and playback device for recording and playing back on a recording medium a digital video signal

coded by using a motion compensation prediction and an orthogonal transform, said device comprising:

means for dividing one frame portion of video data into n areas ($n > 1$) with respect to at least an I picture for an intra-frame coding at the time of recording;

means for recording the order of the area for which recording is started, by scrolling in the unit of GOP of the motion compensation prediction when recording in an area unit the I picture that is divided into n areas, while at the same time recording position information representative of the recording position on the recording medium of 1 through n areas in the GOP;

means for reading at least the I picture from the recording medium at the time of the special playback;

a buffer memory for storing data of the I picture which is read;

means for outputting a special playback picture in accordance with the data of the I picture which is read; and

interpolating means for interpolating an area which cannot be read by the use of the data of the preceding screen when the whole I picture area cannot be read.

8. A digital video signal record and playback device for

recording and playing back on a recording medium in the unit of several frames a digital video signal coded in the unit of several frames in which an I picture for an intra-frame coding, a P picture for a motion compensation prediction in the forward direction, and a B picture for the motion compensation prediction by using as reference pictures the I picture and the P picture located before and after in time, said device comprising:

means for dividing one frame portion of video data into n areas ($n > 1$) with respect to at least the I picture and the P picture at the time of recording, and coding the data in the area unit which is divided into n areas;

means for recording an area which comes to the center on the screen in an area unit by giving a priority to the area and giving a priority to the I picture with respect to the I picture frame and the P picture frame which are divided into n areas while at the same time recording position information representative of the recording position on the recording medium of divided 1 through n areas;

means for reading at lest the I picture and the P picture from the recording medium at the time of the special playback;

a buffer memory for storing data of the I picture and the P picture which is read;

means for outputting in the unit of frame the data of the I picture and the P picture which is read, as a special playback picture; and

interpolating means for interpolating an area which cannot be read by the use of the data of the preceding screen when the whole I picture or the whole P picture area cannot be read.

9. A digital video signal record and playback device for recording and playing back on a recording medium in the unit of several frames a digital video signal coded in the unit of several frames in which an I picture for an intra-frame coding, a P picture for a motion compensation prediction in the forward direction, and a B picture for the motion compensation prediction by using as reference pictures the I picture and the P picture located before and after in time, said device comprising:

means for dividing one frame portion of video data into n areas ($n > 1$) with respect to at least the I picture and the P picture at the time of recording, and coding the data in the area unit which is divided into n areas;

means for recording an area which comes to the center on the screen in an area unit by giving a priority to the area and giving a priority to the I picture with respect to the I picture frame and the P

picture frame which are divided into n areas while at the same time recording position information representative of the recording position on the recording medium of divided 1 through n areas;

means for reading data in the areas 1, 2, ---, n one by one from continuous n I pictures and P pictures when decoding one screen portion of the playback picture at the time of the special playback; and

means for outputting one screen portion of the special playback picture in accordance with the data of the I picture and the P picture which is read; and

interpolating means for interpolating an area which cannot be read by the use of the data of the preceding screen when the whole I picture or the whole P picture area cannot be read.

10. A digital video signal record and playback device for recording and playing back on a recording medium in the unit of several frames a digital video signal coded in the unit of several frames in which an I picture for an intra-frame coding, a P picture for a motion compensation prediction in the forward direction, and a B picture for the motion compensation prediction by using as reference pictures the I picture and the P picture located before and after in time, said device comprising:

means for dividing one frame portion of video data into n areas

(n > 1) with respect to at least the I picture and the P picture at the time of recording, and coding the data in the area unit which is divided into n areas;

means for giving a priority to the I picture out of the I picture and the P picture which are divided into n areas, and recording the position of the area for record starting, by scrolling in the unit of the I and the P picture frame when recording in an area unit the I picture and the P picture divided into n areas, while at the same time recording position information representing the record position on the recording medium of each area in the GOP;

means for reading from the recording medium at least the I picture or the P picture at the time of the special playback;

a buffer memory for storing data of the I picture or the P picture which is read;

means for outputting the data of the I picture or the P picture which is read, in the unit of frame as the special playback picture; and

interpolating means for interpolating an area which cannot be read by the use of the data of the preceding screen when the whole I picture or the whole P picture area cannot be read.

11. A digital video signal playback device for reading and playing back data recorded on a recording medium by coding a digital

video signal using a motion compensation prediction and an orthogonal transform, said device comprising:

data rearranging means for rearranging the data recorded on the recording medium in the order of data before the division in accordance with header information in a packet and outputting it at the time of the normal playback, the data to be rearranged being obtained by dividing at least an I picture for an intra-frame coding with a frequency region, a quantization level, or a space resolution degree to constitute a bitstream of video data in which data more important as a picture out of the data divided at least with respect to the I picture is arranged at the front thereof, and arranging the address information of the data which is divided as header information at the front of the bitstream of video data to constitute the packet; and

special playback data output means for performing a special playback by decoding data arranged at the front of the recording medium to be outputted at the time of the special playback.

12. A digital video signal playback method for playing back a digital video signal coded and recorded by using a motion compensation prediction and an orthogonal transform, said method comprising the steps of:

rearranging the data recorded on a recording medium is

rearranged in the order of data before the division in accordance with header information in a packet and outputting it at the time of the normal playback, the data to be rearranged being obtained by dividing at least an I picture for an intra-frame coding with a frequency region, a quantization level, or a space resolution degree to constitute a bitstream of video data in which data more important as a picture out of the data divided at least with respect to the I picture is arranged at the front thereof, and arranging the address information of the data which is divided as header information at the front of the bitstream of video data to constitute the packet; and

performing a special playback by decoding data arranged at the front of the recording medium to be outputted at the time of the special playback.

13. A digital video signal record and playback device for recording on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform and for reading and playing back the data from the recording medium, said device comprising:

means for dividing at least an I picture for an intra-frame coding with a frequency region, a quantization level or a space resolution;

means for constituting a bitstream of video data in which data more important as a picture is arranged at the front thereof out of the data divided at least with respect to the I picture;

means for constituting a packet by arranging address information of the divided data as header information at the front of the bitstream of video data;

means for recording the constituted data on the recording medium;

data rearranging means for rearranging and outputting data in the data order before the division in accordance with header information in the packet at the time of the normal playback; and

special playback data outputting means for decoding and outputting data arranged at the front at the time of the special playback for performing the special playback.

14. A digital video signal record and playback method for playing back a digital signal coded and recorded by using a motion compensation prediction and an orthogonal transform, said method comprising the steps of:

dividing at least an I picture for an intra-frame coding with a frequency region, a quantization level or a space resolution;

constituting a bitstream of video data in which data more important as a picture is arranged at the front thereof out of the data

divided at least with respect to the I picture;

recording on the recording medium the data by arranging the address information of the divided data as header information at the front of the bitstream of video data to constitute a packet; and

rearranging and outputting data in the order of data before the division in accordance with header information in the packet at the time of the normal playback, and performing the special playback by decoding and outputting the data arranged at the front at the time of the special playback.

15. A digital video signal record and playback device for recording on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform and playing back the data from the recording medium, said device comprising:

means for dividing at least an I picture for an intra-frame coding at the time of recording into n areas ($n > 1$) and rearranging the I picture data divided into n areas in the area unit to constitute a bitstream of video data in which an area which comes to the center on the screen is arranged at the front thereof;

means for recording on the recording medium the data by arranging the address information of the divided area as header information at the front of the bitstream of video data to constitute a packet;

data rearranging means for rearranging and outputting the I picture data in the area unit in accordance with header information arranged at the front of the packet at the time of the normal playback; and

special playback data output means for performing the special playback by outputting only the I picture data which can be read in a definite time from the front of the packet at the time of the special playback.

16. A digital video signal record and playback method for recording on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform and playing back data from the recording medium, said method comprising the steps of:

dividing at least an I picture for an intra-frame coding at the time of recording into n areas ($n > 1$) and rearranging the I picture data divided into n areas in the area unit to constitute a bitstream of video data in which an area which comes to the center on the screen is arranged at the front thereof;

recording on the recording medium the data by arranging the address information of the divided area as header information at the front of the bitstream of video data to constitute a packet; and

rearranging and outputting the I picture data in the area unit

in accordance with header information arranged at the front of the packet at the time of the normal playback, and performing the special playback by outputting only the I picture data which can be read in a definite time from the front of the packet at the time of the special playback.

17. A digital video signal playback device for reading and playing back data recorded on a recording medium by coding a digital video signal using a motion compensation prediction and an orthogonal transform, said device comprising:

data rearranging means for rearranging and outputting in the unit of area the I picture data rearranged for each area in accordance with the header information arranged at the front of the packet at the time of the normal playback, with respect to the data recorded on the recording medium, the data being obtained by dividing at least an I picture for an intra-frame coding into n areas ($n > 1$) and rearranging the I picture data divided into n areas in the area unit to constitute a bitstream of video data in which an area which comes to the center on the screen is arranged at the front thereof and by arranging address information of the divided area as header information at the front of the bitstream of video data to constitute a packet; and

special playback data output means for performing a special playback by outputting only data which can be read in a definite time

from the front of the packet at the time of the special playback.

18. A digital video signal playback method for reading and playing back data recorded on a recording medium by coding a digital video signal by using a motion compensation and an orthogonal conversion, said method comprising the steps of;

rearranging and outputting in the unit of area the I picture data rearranged for each area in accordance with the header information arranged at the front of the packet at the time of the normal playback, with respect to the data recorded on the recording medium, the data being obtained by dividing at least an I picture for an intra-frame coding into n areas ($n > 1$) and rearranging the I picture data divided into n areas in the area unit to constitute a bitstream of video data in which an area which comes to the center on the screen is arranged at the front thereof and by arranging address information of the divided area as header information at the front of the bitstream of video data to constitute a packet; and

performing a special playback by outputting only data which can be read in a definite time from the front of the packet at the time of the special playback.

19. A digital video signal record and playback device for recording on a recording medium a digital video signal coded by using a

motion compensation prediction and an orthogonal transform and playing back the data from the recording medium, said device comprising:

means for dividing at least an I picture for an intra-frame coding at the time of recording according to a low frequency region and a high frequency region, a quantization level or a space resolution;

means for rearranging the basic data out of at least the divided I picture data in each area unit on the screen to constitute a bitstream of video data in which an area located at the central part of the screen is arranged at the front;

means for arranging the address information of the divided area, the data division and picture at the front of the bitstream of video data as header information to constitute a packet thereby recording the information on the recording medium;

data rearranging means for rearranging and outputting data in the unit of area in accordance with the header information arranged at the front of the packet at the time of the normal playback;

means for rearranging data in the order before the division; and

special playback data output means for performing the special playback by outputting only the data which can be read within a definite time from the front of the packet at the time of the special playback.

20. A digital video signal record and playback method for recording on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform and playing back the data from the recording medium, said method comprising the steps of:

dividing at least an I picture for an intra-frame coding at the time of recording according to a low frequency region and a high frequency region, a quantization level or a space resolution;

rearranging the basic data out of the divided I picture data in each area unit on the screen to constitute a bitstream of video data in which an area located at the central part of the screen is arranged at the front;

arranging the address information of the divided area, the data division and picture at the front of the bitstream of video data as header information to constitute a packet thereby recording the information on the recording medium; and

rearranging and outputting data in the unit of area in accordance with the header information arranged at the front of the packet at the time of the normal playback, and rearranging the divided data in the original order thereby performing the special playback by outputting only the data which can be read within a definite time from the front of

the packet at the time of the special playback.

21. A digital video signal playback device for playing back from a recording medium a digital video signal data coded by using a motion compensation prediction and an orthogonal transform, said device comprising:

data rearranging means for rearranging and outputting data recorded on the recording medium in the unit of area in accordance with the header information arranged at the front of the packet at time of the normal playback, the data being obtained by dividing at least an I picture for an intra-frame coding at the time of recording according to a low frequency region and a high frequency region, a quantization level or a space resolution, and further rearranging the basic data out of at least the divided I picture data in each area unit on the screen to constitute a bitstream of video data in which an area located at the central part of the screen is arranged at the front, and arranging the address information of the divided area, the data division and picture as header information at the front of the bitstream of video data as header information to constitute the packet; and

means for rearranging data in the order before the division; and

special playback data output means for performing the special playback by outputting only the data which can be read within a definite

time from the front of the packet at the time of the special playback.

22. A digital video signal playback method for playing back from a recording medium a digital video signal data coded by using a motion compensation prediction and an orthogonal transform, said method comprising the steps of:

rearranging and outputting data recorded on the recording medium in the unit of area in accordance with the header information arranged at the front of the packet at time of the normal playback the data being obtained by dividing at least an I picture for an intra-frame coding at the time of recording according to a low frequency region and a high frequency region, a quantization level or a space resolution, and further rearranging the basic data out of the divided I picture data in each area unit on the screen to constitute a bitstream of video data in which an area located at the central part of the screen is arranged at the front, and arranging the address information of the divided area, the data division and picture as header information at the front of the bitstream of video data to constitute the packet;

rearranging the divided data in the original order; and

performing the special playback by outputting only the data which can be read within a definite time from the front of the packet at the time of the special playback.

23. A digital video signal record device for recording on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform, said device comprising:

first coding means for coding under a predetermined condition a video signal comprising a coded picture including at least a picture subjected to an intra-frame coding out of digital video signals coded by using the motion compensation prediction and the orthogonal transform;

second coding means for coding a residual difference component coded by using said first coding means out of the video signal; and

data arranging means for arranging each output data outputted from said first coding means and second coding means at a predetermined position in each picture group data for each of the picture group data.

24. A digital video signal record device according to claim 23 wherein said first coding means codes video data thinned in a predetermined interval with respect to the video signal comprising the coded picture including at least the picture subjected to the intra-frame coding.

25. A digital video signal record device according to claim 23, wherein said first coding means codes only a low-frequency region which is subjected to the orthogonal transform.

26. A digital video signal record device according to claim 23, wherein said first coding means roughly quantizes on a quantization level for coding.

27. A digital video signal record device for recording on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform, said device comprising:

means for segmenting for each of predetermined bits a video signal comprising a coded picture including at least a picture subjected to an intra-frame coding out of digital video signals coded by using the motion compensation prediction and the orthogonal transform; and

low frequency region extracting means for extracting data of the low frequency region from each of the segmented data strings.

28. A digital video signal playback device for playing back from a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform divided into a low frequency region data and a high frequency region data, said device comprising:

data rearranging means for rearranging in a predetermined order the low frequency region data and the high frequency region data; and

mode switching means for selecting either a mode for decoding

rearranged data, or a mode for selectively decoding the low frequency region data.

29. A digital video signal playback device according to claim 28, further comprising:

data processing means for decoding only data which can be decoded in the case where the data is decoded in the mode for decoding only the low frequency region data, discarding data which cannot be decoded in the vicinity of the boundary of a predetermined number of bits, and replacing the obtained high frequency region data with a fixed value for performing an inverse orthogonal transform.

30. A digital video signal record device for recording on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform, said device comprising:

means for adding a block end code to a coded data of each blocks of a video signal comprising a coded picture including at least a picture subjected to an intra-frame coding out of digital video signals coded by using the motion compensation prediction and the orthogonal transform when the data reaches a predetermined number of bits as low frequency region data; and

coding means for coding the coded data exceeding the

predetermined number of bits added with the block end code as high frequency region data.

31. A digital video signal playback device for reading from a recording medium coded data formed by partitioning with a block end code a low frequency region data and a high frequency region data coded based on a motion compensation prediction and an orthogonal transform, said device comprising:

data reconstructing means for reconstructing data on the basis of the low frequency region data, the high frequency region data and the block end code;

mode switching means for selecting either a mode for decoding the reconstructed data or a mode for selectively decoding only the low frequency region data;

decoding means for decoding coded data reconstituted on the basis of the output of said mode switching means; and

data processing means for replacing the high frequency region data with a fixed value for an inverse orthogonal transform.

32. A digital video signal playback device for reading from a recording medium a digital video signal comprising a low resolution component data coded by using a motion compensation prediction and an orthogonal transform being thinned in pixel, and a differential

component data between the picture before thinning in pixel and the picture after thinning in pixel to be interpolated, said device comprising:

means for synthesizing the low resolution component data and the differential component data; and

means for decoding the synthesized data.

33. A digital video signal playback device according to claim 32, further comprising, mode switching means for switching over between a mode for synthesizing and decoding the low resolution component data and the differential component data and a mode for decoding only the low resolution component data.

34. A digital video signal playback device according to claim 32, further comprising, interpolating means for generating a picture interpolated after decoding at the time of decoding the low resolution picture.

35. A digital video signal record device for recording on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform, said device comprising:

judging means for judging the degree of deterioration of a picture when the data is coded and decoded on the basis of the motion

compensation prediction and the orthogonal transform;

adaptive coding means for performing a coding with adaptively changing a data rate on the basis of a judgement output from said judging means; and

information adding means for adding an audio signal, additional information and an error correction code;

wherein data rate information is multiplexed with the additional information or is written in a predetermined region of the recording medium.

36. A digital video signal record device for recording on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform, said device comprising:

judging means for judging the degree of deterioration of a picture when the data is coded and decoded on the basis of the motion compensation prediction and the orthogonal transform;

information adding means for adding an audio signal, additional information and an error correction code; and

first coding means for coding a video signal thinned at a predetermined interval with respect to a video signal comprising a coded picture including at least a picture subjected to an intra-frame coding;

and

second coding means for coding a residual difference component by the coding of the video signal using said first coding means;

wherein the coding is performed in such a manner that the data rate in either said first coding means or said second coding means is adaptively changed on the basis of a judgement output from said judging means.

37. A digital video signal record device for recording on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform, said device comprising:

judging means for judging the degree of deterioration of a picture when the data is coded and decoded on the basis of the motion compensation prediction and the orthogonal conversion;

information adding means for adding an audio signal, additional information and an error correction code;

fist coding means for coding only a low frequency region which is subjected to the orthogonal conversion with respect to a video signal comprising a coded picture including at least a picture subjected to an intra-frame coding; and

second coding means for coding a residual difference component

by the coding of the video signal using said first coding means;

wherein the coding is performed in such a manner that the data rate in either said first coding means or said second coding means is adaptively changed on the basis of a judgement output from said judging means.

38. A digital video signal record device for recording on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform, said device comprising:

judging means for judging the degree of deterioration of a picture when the data is coded and decoded on the basis of the motion compensation prediction and the orthogonal transform;

information adding means for adding an audio signal, additional information and an error correction code;

first coding means for coding a video signal comprising a coded picture including at least a picture subjected to an intra-frame coding with a quantization at a rough quantization level; and

second coding means for coding a residual difference component by the coding of the video signal using said first coding means;

wherein the coding is performed in such a manner that the data rate in either said first coding means or said second coding means is

adaptively changed on the basis of a judgement output from said judging means.

39. A digital video signal playback device for reading data in which a data rate is adaptively variable in accordance with a picture pattern with respect to the data coded by using an motion compensation prediction and an orthogonal transform, said device comprising:

mode switching means for switching a playback mode between the normal playback mode and the special playback mode;

data rate information extracting means for extracting data rate information; and

position calculating means for calculating a position on a recording medium where data for the special playback exists on the basis of data rate information outputted from said data rate information extracting means at the time of the special playback mode.

40. A digital video signal playback device according to claim 39, further comprising, head position converting means for controlling a head position to a position on a recording medium in accordance with an output from said position calculating means and a special playback speed.

41. A digital video signal record device for recording on a recording medium a digital video signal coded by using a motion compensation prediction and an orthogonal transform, said device

comprising:

coding means for performing a coding with controlling a code amount corresponding to a region assigned to one picture group formed by a digital video signal coded on the basis of the motion compensation prediction and the orthogonal transform;

code amount comparing means for comparing an output from said coding means with a predetermined code amount; and

data supplying means for embedding superfluous data in a space region of a picture group having a space region on the basis of the output from said code amount comparing means.

42. A digital data video signal playback device for reading from a recording medium a digital video signal data coded by using a motion compensation prediction and an orthogonal transform to embed data of other picture groups in a space region of a picture group formed on the basis of this coded data, said device comprising:

data reconstructing means for reconstructing the coded data of embedded video signal into the original picture group; and

data decoding means for decoding data reconstructed by said data reconstructing means.

43. A data video signal playback device for generating a first and a second decoded data corresponding to a first and a second coded data

in accordance with a predetermined condition from data coded on the basis of a motion compensation prediction and an orthogonal transform and having an arrangement of the first and the second coded data at a predetermined position in each picture group, said device comprising:

at least one decoding means out of a first decoding means for obtaining a playback picture by decoding the first and the second coded data, a second decoding means for obtaining a playback picture corresponding to a low frequency region of a picture subjected to an intra-frame coding, the number of thinned pixels or a rough quantization by decoding the first coded data, and a third decoding means for obtaining a playback picture corresponding to at least a picture subjected to the intra-frame coding, a low frequency region of a picture subjected to an inter-frame prediction coding, the number of thinned pixels or a rough quantization; and

mode switching means for switching over among the decoding means as to which of said decoding means is used at the time of the special playback, on the basis of the special playback speed.

44. A digital video signal playback device for playing back from a recording medium a video information coded on the basis of a motion compensation prediction and an orthogonal transform; said device comprising:

video data extracting means for extracting data corresponding to a video signal from a playback code; and

video data decode and playback means for decoding and playing back video data outputted from said video data extracting means; and

mode switching means for switching over a mode among a normal playback mode, a mode for playing back and displaying either an odd number field or an even number field, and a mode for playing back and displaying a picture by reversing an odd number field or an even number field.

45. A digital video signal playback device for generating a first and a second decoded data corresponding to a first and a second coded data in accordance with a predetermined condition from data coded on the basis of a motion compensation prediction and an orthogonal transform, said data having an arrangement of the first and the second coded data at a predetermined position in each picture group, said data having a coded data rate being adaptively variable in accordance with a picture pattern, said device comprising:

at least one decoding means out of a first decoding means for obtaining a playback picture by decoding the first and the second coded data, a second decoding means for obtaining a playback picture corresponding to a low frequency region of a picture subjected to an

intra-frame coding, the number of thinned pixels or a rough quantization by decoding the first coded data, and a third decoding means for obtaining a playback picture corresponding to at least a picture subjected to the intra-frame coding, a low frequency region of a picture subjected to an inter-frame prediction coding, the number of thinned pixels or a rough quantization; and

mode switching means for switching over among the decoding means as to which of said decoding means is used at the time of the special playback, on the basis of the special playback speed.